

ABSTRACT

The invention relates to a dispensing cylinder, a large capacity dispensing device, and a method of using a large capacity dispensing device, and aims at providing a dispensing cylinder, a large capacity dispensing device, and a method of using a large capacity dispensing device, with high quantitativity and capable of suppressing the scale of the device and efficiently utilizing working space, despite the relatively large volumes of fluid handled. The construction comprises: a small diameter section, a large diameter section which communicates with the small diameter section and is capable of holding fluids, a sliding section provided in a slidable manner within the large diameter section which enables fluid to be sucked and discharged to and from the large diameter section through the small diameter section, and a connection section which connects the sliding section in a detachable manner to a suction and discharge mechanism which drives the sliding section.

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- 10, 80...Dispensing cylinder
- 11, 81...Small diameter section
- 12...Large diameter section
- 13...Piston (sliding section)
- 5 14...Rod (sliding section)
- 15...T shaped end section (connection section)
- 17...Flange tube (securing section)
- 21...Sheath
- 23...Engagement section
- 10 24, 124...Large capacity dispensing device
- 25...Suction and discharge mechanism
- 26...Main body section
- 27...Y axis carriage
- 29...Container placement stage
- 15 30...Optical measurement section
- 31, 131...Barcode reader
- 32...Magnetic section
- 33...T-shaped cavity (connection target section)
- 35...Sandwiching member (fitting section)
- 20 37a...Gap elimination plate (gap elimination mechanism)
- 50...X axis carriage
- 53...CCD camera (optical measuring section)
- 54...Mirror (optical measuring section)
- 55, 56, 57, 58, 59, 60, 101, 109...Container (bottle)
- 25 85...Ball end section (connection section)
- 100, 108...Multiple container storage section